

App. Serial No. 09/851,757
Docket No.: US018047 US

In the Claims:

Please amend claims 1-4, 6-8 and 26 as indicted below. This listing of claims replaces all prior versions.

1. (*Currently Amended*) A keypad security circuit comprising:

~~a comparator adapted to perform a bit wise comparison of an a driver signal and a resulting signal;~~

~~a column output driver coupled to said comparator, said column output driver coupled adapted to drive a keypad strong driver signal on a column;~~

~~a row output driver coupled to said comparator, said row output driver adapted to drive an a keypad strong driver signal on a row;~~

a programmable column word constructor coupled to said row output driver, said programmable column word constructor adapted to provide a weak driver signal on ~~[[a]]~~ said column; and

a programmable row word constructor coupled to said column output driver, said programmable row word constructor adapted to provide a weak driver signal on said row~~[[.]]~~;

a switch adapted to selectively connect said column and said row thereby forming a resulting signal; and

a comparator coupled to said column output driver and said row output driver, said comparator adapted to perform a bit wise comparison of said resulting signal and at least one of said strong driver signal on said column, said strong driver signal on said row, said weak driver signal on said column and said weak driver signal on said row.

2. (*Currently Amended*) The keypad security circuit of claim 1 wherein a set of digital values randomly varies over both the bits used to feed at least one of the driver signals in each digital word and overtime over time.

3. (*Currently Amended*) The keypad security circuit of claim ~~[[2]]~~ 1 wherein a set of random digital values is from a register file and are sequentially sent to the columns and rows as said ~~column~~ strong driver signal on a column and said ~~row~~ strong driver signal on a row .

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4. *(Currently Amended)* The keypad security circuit of claim 2 wherein ~~a~~ said register file is updated at random times or by ~~significant~~ events such as key presses.
5. *(Original)* The keypad security circuit of claim 2 wherein said weak driver signals are changed to be independently pulled up or pulled down to support random bit values on each of said rows and columns.
6. *(Currently Amended)* The keypad security circuit of claim 2 wherein said ~~column~~ strong driver signal on a column is a logical zero value when an opposing row weak driver signal is a logical one value.
7. *(Currently Amended)* The keypad security circuit of claim 2 wherein ~~a row~~ said strong driver signal on a row is a logical one value when an opposing column weak driver signal is a logical zero value.
8. *(Currently Amended)* The keypad security circuit of claim 2 wherein said programmable column word constructor and said programmable ~~column~~ row word constructor comprise both a pull-up and a pull-down that are independently enabled.
- Claims 9-14 (Cancelled)
- Claims 15-25 (Cancelled)
26. *(Currently Amended)* The keypad security circuit of claim 2 wherein said ~~column~~ strong driver signal on a column and said ~~row~~ strong driver signal on a row both connect to the same bits from ~~a~~ said register file.